

From boatanchors@theporch.com Tue May 23 11:48:32 1995  
Date: Tue, 23 May 1995 06:48:32 -0500  
Message-Id: <199505231142.HAA00268@gatekeeper.ddp.state.me.us>  
From: afpgreg@gatekeeper.ddp.state.me.us (Paul V. Gregory)  
Subject: 6js6 tubes

Aye, Mates...

I'm pondering whether to drop a few coin on a mint semi-tubed Yaseu FT101F (Egad--Unclean! Unclean! Stone him!).

Sorry to be so blastphemous, BUT its PA's ARE the above tubes. Are they readily available? Are they dear?

--KB1A0C, Paul

From boatanchors@theporch.com Wed May 24 04:16:43 1995  
Date: Tue, 23 May 1995 23:16:43 -0500  
Message-Id: <9505240413.AA10849@inforamp.net>  
From: bbell@inforamp.net (robert bell)  
Subject: <didn't bother with a subject>

subscribe

-----BOB VE3VJX

From boatanchors@theporch.com Tue May 23 05:54:43 1995  
Date: Tue, 23 May 1995 00:54:43 -0500  
Message-Id: <Pine.SUN.3.91.950522222547.18228A-1000000@coyote.rain.org>  
From: "Ray L. Mote" <rmote@rain.org>  
Subject: A Challenge: WW2 "American War Standard" Info

The last two pages of TM 11-4700 (on repair of test instruments & meters) give info on the AWS type designation for meters. We \*need\* the basic document, to shed light on all those dusty, musty parts in junkboxes! Am I crazy? Read the part on meters, and see if you think it's useful:

EXAMPLE: MR25F001DCMA  
sections: aabbcddeeff

- a) Component:  
MR = electrical indicating instrument
- b) Case size, type, and material:  
24 = 2.5-inch molded-phenolic case, round, flush-mounting,

panel-type instrument, calibrated for use on a steel panel  
0.09-inch thick.

25 = 2.5-inch molded-phenolic case, round, flush-mounting,  
panel-type instrument, calibrated for use on a nonmagnetic panel

34 = 3.5-inch molded-phenolic case, round, flush-mounting,  
panel-type instrument, calibrated for use on a steel panel  
0.09-inch thick.

35 = 3.5-inch molded-phenolic case, round, flush-mounting,  
panel-type instrument, calibrated for use on a nonmagnetic panel

c) Dial and pointer color scheme:

B = White markings and pointer, black background

F = Fluorescent markings and pointer, black background

S = Self-luminous markings and pointer, black background (Geiger  
counter time!)

W = Black markings and pointer, white background

Y = Black markings and pointer, buff background

d) Number of units shown by full-scale deflection:

These three figures designate the number of units shown by  
full-scale deflection of the instrument. Where the full scale is  
less than three figures, C's are inserted to the left to fill out to  
three figures.

Where the letter R is used in this group, between two figures, it  
represents a decimal point. Thus, a 1.5-volt voltmeter would be  
designated by 1R5.

e) Kind of current for which the instrument was designed:

AC = Alternating current (60 cps nominal)

AD = AC/DC (AC 25 to 125 cps only)

AE = Alternating current (800 cps nominal)

AF = Alternating current (400 cps nominal)

AR = Alternating current, rectifier type

DC = Direct current

RF = Radio frequency, conventional scale

RL = Radio frequency, linear expanded scale

SPEC (used in place of e & f) indicates special instruments, such as  
zero-center ammeters, milliammeters, microammeters, and other  
special instruments. Such instruments are arbitrarily assigned serial  
numbers to be used in place of the three figures called for in group  
(d).

f) Units indicated by instrument:

UA = microamperes

MA = milliamperes

AA = amperes

KA = kiloamperes  
MV = millivolts  
VV = volts  
KV = kilovolts  
DB = decibels  
VU = volume units  
WW = watts  
KW = kilowatts  
GW = megawatts

The example above (MR25F001DCMA) would be an electrical indicating instrument with a 2.5-inch molded-phenolic case, round, flush-mounting, to be mounted on a 0.09-inch steel panel, with a black background dial with fluorescent markings and pointer, with a full-scale deflection of one milliampere, direct current.

They must have extended this approach to later systems, as it sure appears a lot on meters we know to be from the fifties, sixties, seventies, etc.

Anyone know where we could find the basic document?

From boatanchors@theporch.com Tue May 23 20:02:05 1995  
Date: Tue, 23 May 1995 15:02:05 -0500  
Message-Id: <CPLAN030.TFMA.813752120095143FCPLAN030@ION.CHEVRON.COM>  
From: "Marcotte, T F (T)" <TFMA@chevron.com>  
Subject: BC-348 Wanted

From: Marcotte, T F (Tom)  
To: OPEN ADDRESSING SERVI-OPENADDR  
Subject: BC-348 Wanted  
Date: 1995-05-23 14:45  
Priority:

-----  
I have a (2nd) friend at the office who wants a BC-348 or similar BA.

Rig must be in good cosmetic and working condition, 120 VAC or 28V.

I don't think he is looking for a charity rig, so if you have a nice black box like this, please reply here.

Merci!!

DE tom n5off

tfma@chevron.com

From boatanchors@theporch.com Tue May 23 19:19:14 1995  
Date: Tue, 23 May 1995 14:19:14 -0500  
Message-Id: <199505231900.MAA10331@bud.indirect.com>  
From: dmedley@indirect.com (David J. Medley)  
Subject: Boatanchors News Groups

Are there other news groups out there dealing with antique communications equipment or specialized groups interested in say, Collins or Hallicrafters? Any info would be appreciated.  
de Dave KI6QE/VK2IMJ

From boatanchors@theporch.com Tue May 23 15:52:14 1995  
Date: Tue, 23 May 1995 10:52:14 -0500  
Message-Id: <9505231550.AA09883@speckle.ncsl.nist.gov>  
From: morgan@speckle.ncsl.nist.gov (Roy Morgan)  
Subject: Re: Carbon Comp Resistors

Bill said:

> ...We are using our BAs designed for operation on 110 to  
>115 VAC and running them on 120 to 126 volt lines; So, yeah, it's  
>getting extra hot inside those 75A-4s and SP-600s,  
... We can  
>do a redesign with modern parts and ruin the authenticity, or we can use a  
>Variac or constant voltage transformer and run the radio on power it was  
>designed for.

Note: The SP-600's have a tap on the power transformer for higher line voltage (120 volts, I think). So use it. (The R-390 does not.)

Making a line voltage buckler is easy and cheap. I'll post details if anyone wants them.

-- Roy --

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899

(National Institute of Standards and Technology, formerly NBS)  
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov  
---

From boatanchors@theporch.com Tue May 23 16:19:04 1995  
Date: Tue, 23 May 1995 11:19:04 -0500  
Message-Id: <"Macintosh \*/PRMD=MOT/ADMD=MOT/C=US/"@MHS>  
From: Don\_Burns-EPUR01@email.mot.com  
Subject: Carbon Comp Resistors

There were two fundamental reasons for manufacturers to switch from the use of carbon composition to film (primarily carbon film) resistors back in the 70s and early 80s. The first reason is cost. Allen Bradley and Panasonic (Matsushita) had reached a low price asymptote on comps. They simply could not reduce their manufacturing costs any further. Carbon film had arrived on the scene a bit earlier, primarily out of the far east. But the carbon film product had acquired a reputation for being junk - serious problems with the outer covering coming off and the resistors shorting to adjacent components or printed circuit runners. About this same time some manufacturers began to see another form of resistance instability in the carbon comps. We found that they were great at absorbing humidity which of course contributed greatly to the already present stability issue.

Panasonic had jumped on the carbon film bandwagon by the late seventies and solved the mechanical integrity problems, and at that point we began see a very steep downward price trend on this product. They were better than the comps and became cheaper, much cheaper. Allen Bradley could not compete. Panasonic made carbon comps also and they dropped their efforts on this product. Thus the demise of the carbon composition resistor.

--

Don Burns	\	Motorola E-Mail: epur01
Motorola Inc.	\	Internet: epur01@email.mot.com
North American Radio Systems Divn	\	Voice: 305-723-5518
Plantation, FL U.S.A.	\	Fax: 305-723-4343

X.400: /c=us/admd=attmail/prmd=motorola/g=don/s=burns/ddt=id/ddv=epur01/

From boatanchors@theporch.com Tue May 23 07:13:42 1995  
Date: Tue, 23 May 1995 02:13:42 -0500  
Message-Id: <199505230711.AAA23708@mailhost.primenet.com>  
From: nx7u@primenet.com (Scott Townley)  
Subject: Re: Carbon resistors vs Metal film resistors

Here's one interesting piece of information on various realizations of resistors:

All physical devices generate "flicker" noise, also referred to as 1/f noise, that is physically of a different nature than good ol' thermal (or Johnson) noise that we all know and loathe.

In my old Horowitz and Hill "The Art of Electronics", typical 1/f noise values are actually given for the various resistor constructions: (1st ed., p. 289):

Carbon-composition	0.10uV to 3.0uV (rms microvolts per volt applied to resistor, measured over one decade of frequency)
Carbon-film	0.05uV to 0.3uV
Metal-film	0.02uV to 0.2uV
Wire-Wound	0.01uV to 0.2uV

What does this mean? Well, at least in low noise, high impedance circuits (like many BA receiver front ends), carbon comp can be improved upon by a switch to almost anything!

P.S. this *includes* bias resistors, grid leaks (especially), etc. Noise contributions to front-end amps, preselectors, or first mixers can be significant from many surprising sources!

For what it's worth,  
Scott Townley  
nx7u@primenet.com

From boatanchors@theporch.com Tue May 23 16:45:44 1995  
Date: Tue, 23 May 1995 11:45:44 -0500  
Message-Id: <950523124316\_9359918@aol.com>  
From: KD0HG@aol.com  
Subject: Re: Carbon resistors vs Metal...

A recent post by NX7U@primenet.com states with regard to the flicker noise generated in carbon comp resistors, "...in low noise, high impedance circuits, like BA front ends, carbon comp (resistors) can be improved on by a switch to almost anything...this includes bias resistors, grid leaks, etc..". I do not agree with this global assessment.

Since flicker noise is a function of applied voltage across a resistor and is proportional to same (the given figure for a comp resistor was .1 to 3 microvolts per volt), let's look at a couple of the cases cited. In a BA front end, grid bias is often fed through a large value resistor to the grid of the RF or IF amp. The current flow through the resistor is 0, therefore

the voltage applied across the resistor is zero, therefore the flicker noise generated will be zero. (of course, thermal noise will be present but is independent of resistor material).

In the case of a cathode bias resistor, there will be a voltage impressed across the resistor and flicker noise in the microvolt range will be generated. However, Cathode biased RF and IF amplifiers almost invariably have their cathodes bypassed to ground for RF by a capacitor. Any thermal or flicker noise generated by this bias resistor will be totally bypassed to ground if the cap is doing what it's supposed to.

Same goes for screen dropping resistors- there's a screen bypass cap present...

Grid-leak bias is simply just not used in the RF or IF stages of modern communications equipment ("modern" being since the 1920s).

Finally, the results of hands-on experiments. Thinking it was bad, some two years ago I replaced the 1/2 watt carbon comp resistor feeding bias to the grid of the 1st RF amp of an R-390A with a 1/2 watt carbon film. I could measure no difference whatsoever in the receiver's approximately -150 dbm sensitivity, before or after. .If anyone can achieve a measureable, documentable, and repeatable improvement in a receiver's noise performance by mere substitution of resistor types in the RF or IF stages of a BA receiver, please post it here for the rest of us to try.....bill, KD0HG

From boatanchors@theporch.com Tue May 23 18:30:27 1995  
Date: Tue, 23 May 1995 13:30:27 -0500  
Message-Id: <9505231826.AA14916@ihurry.ih.att.com>  
From: Michael.J.Knudsen@att.com  
Subject: Re: Carbon resistors vs Metal...

I'll agree with KD0HG that most resistors in RF/IF circuits either have no voltage across them or are bypassed to ground.

However, one place high-quality resistors may matter is in the plate loads of audio preamp stages, or of regenerative detectors used in LW/VLF sets. Here, metal film resistors may pay off, and won't drift in value with time like their carbon brethren.

If your BA rcvr still has some hiss or fluff in the speaker even with the last IF or RF tube pulled, this may help.

PS: The BA List stopped sending to me for a week just passed. If there were any juicy R390A items in that period, I'd appreciate a private email copy. Thanks, mike k w9nrd

From boatanchors@theporch.com Tue May 23 20:52:17 1995  
Date: Tue, 23 May 1995 15:52:17 -0500  
Message-Id: <199505232049.PAA11903@zoom.bga.com>  
From: Henry van Cleef <vancleef@bga.com>  
Subject: Re: Carbon resistors vs Metal...

For what it's worth, I did run a few of the locally-obtained noname 5% film resistors through my Boonton RX bridge, just to see what would happen. They looked about the same up through around 150 Mhz anyway, if not higher. They stayed resistive at all frequencies, less what reactive component the leads produced at low frequencies. While I was more interested in seeing if the RX bridge worked across its bands, I didn't see anything indicating that they won't work fine right up through 2 meters on the old iron.

I don't know what made it happen, but my RME set was more than 10 db. quieter after I rebuilt the front end. This was complete disassembly, clean up the coils and switches, replace all caps with mylar or polystyrene, and all resistors with film type. However, except for the local oscillator grid leak, none of these resistors run without a bypass cap. I did wash a hell of a lot of brown crud off everything (which is NOT tobacco smoke), and have a hunch that brown crud on coils and variable caps had more to do with performance issues and noise than anything else.

--

\*\*\*\*\*  
Hank van Cleef vancleef@bga.com vancleef@tmn.com  
\*\*\*\*\*

From boatanchors@theporch.com Wed May 24 03:00:29 1995  
Date: Tue, 23 May 1995 22:00:29 -0500  
Message-Id: <199505240256.TAA11384@netcom2.netcom.com>  
From: rmccarty@netcom.com (roger mccarty)  
Subject: Caught on Packet (FS)

For those whom may be interested, captured this off packet the evening of 5/23.

r 10512 From : WB2BYQ @ WA2SNA.FN21VA.NJ.USA.NA To : SALE @ ALLUS Date :  
950519/0509 Msgid : BF 54846@WA2SNA, 10512@W6TJ \$54846\_WA2SNA Subject :  
ESTATE OF K2ZIH, CLASSIC & NEW Path :  
KJ6VC!KB6JES!K6VE!K6VE!W8AKF!KJ6E0!KJ6E0!N8GTC!WA8GUG!N8PCY!K8QIK!WA8WNI!WB8BII!



W4BS!F6CNB!N4GAA!AE1T!WA1WOK!KA1RTW!K1RQG!WA2SPL!WA2SNA

These items are from the estate of Mike Doliton, K2ZIH of Maywood NJ who became a silent key in April from ALS (Lou Gehrigs disease. All proceeds go to Heather, his wife who can use the cash. No checks unless certified to her and pickup is preferred. If you want something shipped we will get a professional shipper (Mail Store, etc.) to do it and add to price. All these items are complete, good condx unless noted. They are sold as-is however but Mike was very active with this stuff right to the end...

Transceivers Yaesu FT101F, PS, Spkr, Desk Mike, Yaesu phones, Miraje SWR meter. Orig box. \$250.00 Heath SB300/SB401 trans&rcvr, SB630 console, D104 mike, J38 key. \$350.00 Amplifiers: Heath SB220 \$350.00 Yaesu FL2100F \$200.00 Heath SB200 \$200.00 Transmitters: Heath DX40 & VF1 VFO \$50.00 Globe Scout 680 \$50.00 Heath Cheyenne \$50.00 Heath DX100 \$100.00 Johnson Viking I (poor but works, no cab \$50.00 Johnson Viking II good with D104 mike \$100.00 Ameco TX62 6 & 2 meter AM \$35.00 Heath Seneca 6 & 2 \$50.00 Heath Apache SSB converter, early nice \$40.00 later \$30.00 Johnson Matchbox (little one, no meter, excellent) \$40.00 Central Electronics CE100V with monitor scope built-in, exc. \$100.00 Receivers: Hammarlund HQ170 with match speaker \$100.00 RME 6900 \$75.00 Elmac PMR8 mobile rcvr \$25.00 Misc. Tektronix 561A scope with 2B67 time base \$35.00 Tubes: 4-125 \$10.00 813 \$10.00 CALL Pete, WB2BYQ @ (201) 934-0321. Can meet you at local NNJ hamfests BARA, June 3, Dunnellen June 17. Any checks must be certified to Heather Doliton, widow of K2ZIH. 73 to all and thanx. -----

Sorry, ASCII upload, no attempt to justify.

Good Huntin'

Roger KD6CC

From boatanchors@theporch.com Tue May 23 13:25:02 1995  
Date: Tue, 23 May 1995 08:25:02 -0500  
Message-Id: <199505231321.JAA05788@cc01du.unity.ncsu.edu>  
From: rdkeys@unity.ncsu.edu  
Subject: Dummy loads --- some practical rules of thumb

> RF circuits won't work with wirewound resistors. (I saw a  
> homebrew dummy load at Foothill made from big, WW resistors.  
> Bet that worked well!) Film resistors should be OK. Check  
> the data sheet.  
>  
> Richard

> N6NAE

For the sake of discussion, especially as it may relate to boatanchors:

It is probably better engineering practice to not use wirewound resistors in working rf circuits since one does not usually want to introduce stray reactances at odd frequencies (although that usually will have more problem at vhf rather than hf or mf), excepting dummy loads. Dummy loads are a different matter, entirely.

Nothing wrong with wirewound resistors as long as the series impedance of the coil coupled with stray output circuit capacitances resonate in a series LC circuit somewhat above the highest working frequency of the dummy load. Even if the thing resonates at the output frequency, it is still a dummy load, because the resistor loads down the Q of the ``tuned resistor wire'' circuit. In this case it is not a ``pure resistance'', but that matters not to the average boatanchor, especially for testing purposes, in any practical manner, at all.

That is why things like light bulbs (200 watters make great 50 ohm loads), toaster iron elements, etc work fine for the average boatanchor dummy load, and have since the 1920's.

Only when ``modern'' rigs with poor output tuning circuit ranges came aboard did it begin to make any sort of difference. Even then, for practical testing purposes, if it has vacuum tubes in the final, and a PI-net or earlier design tuned tank circuit, most anything will work well, practically, for dummy loads. The only exception of any note to this fundamental rule of thumb is in the specific case where you are matching to a feedline by dumping into an ``artificial feedline load'' (read dummy load) that approximates the antenna feedline. In this case, a tendency to a more pure resistance dummy load is advantageous if you don't want to retune the tank circuits (or antenna tuner circuits) after testing into the dummy load, and merely want to switch to the feedline and run with it. Most hams are wont to retouch the tuning because they can almost never get the pure feedline to match the pure dummy load for the average ham antenna in the average hamshack in average use. Hence, it still really does not matter, practically, if wirewound resistors are used in dummy loads, especially at hf and especially in boatanchors (vhfers and transistor types need not apply).

Food for thought.

73/Bob/NA4G

p.s. lesse, there, wherest is me guilded internet asbestos flak suit

a'hangin' these days..... (:+}}.....

From boatanchors@theporch.com Wed May 24 04:38:57 1995  
Date: Tue, 23 May 1995 23:38:57 -0500  
Message-Id: <9505240003.aa23217@lunatix.lunatix.lex.ky.us>  
From: "Greg Parsons A.K.A. Rat" <gparsons@lunatix.lex.ky.us>  
Subject: DX-100 Manual

Hey guys,

Anyone got a DX-100 manual floating around? I got one tonight that needs cleaning up in a bad way inside, so any help would be nice <g>. Talk about sag the springs on the car, I think this would sink the normal boat! But it should be nice when I get it done.

73,  
Greg  
KE4000

--

On a clear night when the wind is from the west, you can smell America burning brite upon the night.

DoD #0862 Rat NRA Life Member Home Brewer from Hell(tm)

From boatanchors@theporch.com Tue May 23 15:59:03 1995  
Date: Tue, 23 May 1995 10:59:03 -0500  
Message-Id: <n1410895878.93513@msmailgw1.arlut.utexas.edu>  
From: "rohre" <rohre@arlut.utexas.edu>  
Subject: FT-101 tubes conversion

I understand the sweep tubes of the FT-101 were scarce and expensive even in the seventies, as tubes suddenly went away from the consumer TV trade.

Our club station has one as a reserve transceiver, but we were considering a conversion to a more readily available tube that was suggested in the Fox Tango publications back then.

Does anyone have experience with that conversion, and how available are those tubes?

IMHO, one should avoid BA's that have sweep tubes as they are hardest of all to find these days, or am I just not in a good area for them? (I have a DX -20 with one).

73, Stuart K5KVH

rohre@arlut.utexas.edu

From boatanchors@theporch.com Tue May 23 17:08:36 1995  
Date: Tue, 23 May 1995 12:08:36 -0500  
Message-Id: <9505231657.AA04957@etn.com>  
From: doonan@cordmc.dnet.etn.com (Dennis Doonan x6916 (N9VSL))  
Subject: Gonset Communicator II

Hello all,

I am pretty new to the BA list, but have learned a lot about my old radios.

Can any one provide the pin out for the power connector on the back of the 2 meter Communicator II? The rig looks intact and I would like to try 2 meter am here in S.E. Wisconsin.

Thanks to all

73 de Dennis N9VSL

doonan@cordmc.dnet.etn.com

From boatanchors@theporch.com Tue May 23 07:58:47 1995  
Date: Tue, 23 May 1995 02:58:47 -0500  
Message-Id: <m0sDk4u-000Hv1C@beacons.cts.com>  
From: kevin@beacons.cts.com (Kevin Sanders)  
Subject: Re: hammarlund sp-600

> I can't say for certain which Hammarlund SP600 products did or did not have  
> the gold plated tuning capacitor.

I haven't checked my SP600 JX17 tuning cap, but my HQ140 does have a gold plated one. I dunno if it's real gold though.

What \_was\_ the marketing hype for these anyway?

73,

Kevin Sanders, KN6FQ (SDG)  
kevin@beacons.cts.com

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Try Boatanchors  
For A Real Lift

From boatanchors@theporch.com Tue May 23 16:25:19 1995  
Date: Tue, 23 May 1995 11:25:19 -0500  
Message-Id: <9505231621.AA30674@pilot1.cl.msu.edu>  
From: "Stanley L Flegler" <flegler@pilot.msu.edu>

Subject: Help with Navy Manuals

I called the Navy Publications office (215-697-3217) and asked about the availability of two technical manuals that I saw listed in the boatanchors navy.xref list. I gave them the new 11 digit numbers, 097-970-9010 and 097-034-2000. They told me they had no listings for these manuals. So what gives? If they no longer have the manuals, wouldn't they still have a listing? Has anyone on the list had experience ordering Navy Manuals? Any hints or suggestions would be appreciated. Stan K8RPA, flegler@pilot.msu.edu

From boatanchors@theporch.com Tue May 23 17:17:12 1995

Date: Tue, 23 May 1995 12:17:12 -0500

Message-Id: <9505231715.AA11554@speckle.ncsl.nist.gov>

From: morgan@speckle.ncsl.nist.gov (Roy Morgan)

Subject: Re: Help with Navy Manuals

>I called the Navy Publications office (215-697-3217) and asked about the  
>availability of two technical manuals that I saw listed in the boatanchors  
>navy.xref list. I gave them the new 11 digit numbers, 097-970-9010 and  
>097-034-2000. They told me they had no listings for these manuals. So what  
>gives? If they no longer have the manuals, wouldn't they still have a  
>listing? Has anyone on the list had experience ordering Navy Manuals? Any  
>hints or suggestions would be appreciated. Stan K8RPA, flegler@pilot.msu.edu  
>

Call NTIS (and report on your success, please):

NTIS (National Technical Information Service)

5285 Port Royal Road

Springfield, VA 22161

info: 703-487-4650

order: 800-336-4700

document identification branch: 703-487-4780

-- Roy --

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899

(National Institute of Standards and Technology, formerly NBS)

301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

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From boatanchors@theporch.com Tue May 23 17:41:26 1995

Date: Tue, 23 May 1995 12:41:26 -0500  
Message-Id: <9505231736.AA171469@pilot1.cl.msu.edu>  
From: "Stanley L Flegler" <flegler@pilot.msu.edu>  
Subject: Re: Help with Navy Manuals

Roy, thanks for your help. I called the NTIS originally and was told that they don't deal with Navy Technical Manuals. They gave me the number of the Navy Publications office. However, I called a different number at NTIS, and although they also said they didn't deal with Navy Technical Manuals, they agreed to lookup the numbers on their data base. One manual 0967-970-9010 is out of stock, and they show no listing for the other number 0967-034-2000, even though it is in the Navships.xref.

Does anyone have access to a manual for the WRC-1 system, composed of a T-827B transmitter, AM-3007 amplifier, and R-1051B receiver?  
Stan, flegler@pilot.msu.edu

From boatanchors@theporch.com Tue May 23 07:02:05 1995  
Date: Tue, 23 May 1995 02:02:05 -0500  
Message-Id: <199505230659.XAA20030@netcom12.netcom.com>  
From: rmccarty@netcom.com (roger mccarty)  
Subject: Looking for 6360 & 5894

I am looking for these tubes. Anybody got 'em?

Roger KD6CC

From boatanchors@theporch.com Tue May 23 15:02:36 1995  
Date: Tue, 23 May 1995 10:02:36 -0500  
Message-Id: <9505231500.AA11144@unlinfo.unl.edu>  
From: djw@unlinfo.unl.edu (daniel wright)  
Subject: Navigator parts rig

Greetings.....!

I dunno if I dreamed this or read it in ER or ART 'er what..BUT:  
Was there a post regarding a Navigator(EFJ,of course) parts rig for sale??? And if not,does anyone have such a beast??

Thanks es 73 de Dan -- WA0JRD ..  
djw@unlinfo.unl.edu

From boatanchors@theporch.com Tue May 23 15:50:37 1995  
Date: Tue, 23 May 1995 10:50:37 -0500  
Message-Id: <PMX-TERM-2.02-bsm2ee1-thaake-184>  
From: thaake@bsm2ee1.attmail.com (thaake)  
Subject: Power Supply/xmfr help

BA gang,

I have a vibrator power supply that I need info on. It is apparently made by "James Co." and is a model C-1450. It is 9"W X 6.5"D X 6.5"H and can run on 6V, 12V, or 110V AC. I have no cables or specs on it and would like to use it on my Gonset Commander transmitter. Now if I can only find the Commander's matching VF0!!

Stancor transformer specs. This one is new enough that I should have a Stancor book that has it in it but I cannot find the 3 ring binder that I have various parts books stuck in. The Stancor PN is A3892. It is a "Poly-pedance" Modulation transformer. Has alot of taps. What are the various taps and impedances on each winding??

Thanks,

Tim WA0TSY  
thaake@bsm2ee1.attmail.com

From boatanchors@theporch.com Tue May 23 16:43:52 1995  
Date: Tue, 23 May 1995 11:43:52 -0500  
Message-Id: <801247274.8867582@AppleLink.Apple.COM>  
From: FRANCIS4@applelink.apple.com (Francis, Dexter)  
Subject: R-10 front panel connector ?'s

Ah, the search for the hydra's teeth begins....

On the front panel of the R-10A are three circular connectors, J-502, J-503 and J-506.

J-502 has two pins (male) which look like miniature test lead prongs, as they have 4 leaf springs in a cruciform layout. J-503 and J-506 have the same style of pins, arranged in a hexagonal pattern, with the top pin missing. None of the connectors has any marking or numbering on the pin assignments.

These look somewhat like AMP/Bendix circular commercial avionics connectors,

but I can't be sure. Has anyone been able to determine the OEM and part number for these connectors and their mates or located a source for them used/surplus?

-df

From boatanchors@theporch.com Tue May 23 13:37:17 1995  
Date: Tue, 23 May 1995 08:37:17 -0500  
Message-Id: <Pine.SUN.3.91.950523063035.25870A-100000@crl6.crl.com>  
From: Steven Wilson <randyw@crl.com>  
Subject: R390A questions

Are there any files that may be downloaded (ftp), etc on the R390A performance, technical, FAQ's, etc.

How does it compare with the 75A series, SP600, etc.

Good and bad features.

thanks for the input  
de stan ak0b

From boatanchors@theporch.com Tue May 23 23:18:04 1995  
Date: Tue, 23 May 1995 18:18:04 -0500  
Message-Id: <9505232313.AA22023@ihurry.ih.att.com>  
From: Michael.J.Knudsen@att.com  
Subject: R390A Self-Illuminating Meters?

OK, anyone have an R390 (A) whose meters still glow in the dark?  
I considered myself lucky to have the original meters intact (and working), but they have long since lost their lustrous scintillations.

I've been warned that the loss is due to the phosphors giving out under the radiation bombardment, and that good old Marie Curie's dust is still putting out plenty of alpha particles or whatever, and will for a loooonnng time.

Tritium, however, fades away pretty fast -- half life is 11 years or so.  
I had a great TI LCD watch whose glow faded in about 5 years.  
My brother worked at an army base that replaced the tritium capsules in tank gunsights at regular intervals (not needed in sunny San Diego :-).



Some BA hacker out there must have a working '50s Cold War Special geiger counter. Ever hold it up to those R390 meters? --mike k w9nrd

From boatanchors@theporch.com Tue May 23 23:59:36 1995  
Date: Tue, 23 May 1995 18:59:36 -0500  
Message-Id: <m0sE3oo-000uHAC@twisto.eng.hou.compaq.com>  
From: Dave=Sharp%Legal%Corp=Hou@bangate.compaq.com  
Subject: re: R390A Self-Illuminating Meters?

Actually Tritium is best found NOT with a geiger counter but a hydrogen flame alpha counter. This kind is what replaced all the "cold war specials" which I guess were for reading gamma from U-235 weapons (nice 1296 year half life). Tritium is found using a super sensitive electrometer coupled to an air pump. The alpha counters have a mylar window on the bottom plate with elongated holes. On the top front of the probe there is a flow valve that is set to pass enough pure hydrogen to make a 1" flame (thus the name). I have seen at least one of these jewels in a surplus store in the last 20 years or so.

I think if we'd have needed the old geiger counters there wouldn't have been very many tomorrows. They can't detect alpha at all. Even a piece of paper (and the glass of an R390 meter will stop alpha). I think most meter faces that had radioactive dial paint on them were actually lead glass also and thus stopped most of the beta... ah but the gamma rays from Radium paint - nasty. The tritium is only nasty when let loose as in a broken glow element. It is heavier than air and if ingested (breathed in, it will be VERY likely to give you lung cancer).

Bottom line is this: We have a lot of neato toys left over from some really stressful times (like the radios with the detonators in them, radioactive dials, etc.). We as BA enthusiasts have a responsibility to talk about the technical risks and to do what is right for others in the future to be able to better appreciate the legacy we leave.

Dave Sharp  
Houston, TX USA  
dave=sharp%legal%corp=hou@bangate.compaq.com  
Someday when they move to space, they'll need us firebottle types.

From boatanchors@theporch.com Tue May 23 13:30:22 1995  
Date: Tue, 23 May 1995 08:30:22 -0500  
Message-Id: <"Macintosh \*/PRMD=MOT/ADMD=MOT/C=US/"@MHS>  
From: Scott\_Johnson-AZAX60@email.sps.mot.com  
Subject: RE>RE- Carbon Comp Resistor

RE>RE: Carbon Comp Resistors

5/23/95

It's still hard to beat a comp in applications where the stray inductance of the laser trimmed film resistors (both carbon and metal) will kill the circuit. I am going through hell trying to find a good stock of comps to feather my homebrewing nest, as well as a need I have at work for good ole' AB's. I wouldn't be too hasty about throwing them out-

I have had much more trouble with those cheap jap carbon films that the last chance stockroom (Radio Shack) sells. If you want the best, go for the mil types with the yellow fifth band. Stay away from anything but five percent units, and look for either Allen Bradley or Ohmite. Lastly, I think some of the derision heaped on the colorful little fellows stems from experiences with ancient (pre-WW11) types, which were miserable, indeed.

73, Scott KC7BGE

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Date: 5/22/95 6:08 PM

Bottom line on carbon comp resistors is that they are the Jurassic Park of resistors and should be extinct.

I don't think they are used commercially any more, at least not in serious equipment. Cheap throwaway junk, maybe.

Carbon comp resistors drift with time and temp. I don't care how well derated they are, they will change value eventually.

I no longer use them in repairs or new homebrew. Last year when I moved, I tossed my entire carbon comp resistor bin in the dumpster. (I should have kept a few: the leads can be snipped off for use as jumpers.)

RF circuits won't work with wirewound resistors. (I saw a homebrew dummy load at Foothill made from big, WW resistors. Bet that worked well!) Film resistors should be OK. Check the data sheet.

Richard  
N6NAE

From boatanchors@theporch.com Tue May 23 22:51:09 1995  
Date: Tue, 23 May 1995 17:51:09 -0500  
Message-Id: <m0sE2ka-000uH3C@twisto.eng.hou.compaq.com>  
From: Dave=Sharp%Legal%Corp=Hou@bangate.compaq.com  
Subject: re: Re: Carbon resistors vs Metal...

Hank...

It would be interesting to see if anyone has a spectrograph and could maybe get some of the brown gunk and do a good analysis of what it IS.

Maybe it's related to the tritium in the R390 "self illuminating" meter movements. (by the way Tritium and or Radium are both fairly nasty).

Maybe the brown stuff is powered noise. I've heard that each signal once produced leaves an echo of itself all throughout time. Maybe at high concentration levels the RF in front ends "collects" around coils, bypass caps, etc. This COULD be the brown stuff you washed off... I said could now... Of course the government might place all this research in some super secret classified folder and hurry us all off to Los Alamos or something like that. (Could be ok if the fishing is good).

The best part of this research is that maybe if the BA crowd discovered this new theroem of translation of RF to tangible dust, then maybe the INVERT of the brown liquid noise could be sold to the HI-FI audio crowd to smooth out cables, tube KT88 sockets, maybe even transformers! We could make a LOT of money on this...

Dave

From boatanchors@theporch.com Tue May 23 13:04:49 1995  
Date: Tue, 23 May 1995 08:04:49 -0500  
Message-Id: <9505231300.AA15106@pilot1.cl.msu.edu>  
From: "Stanley L Flegler" <flegler@pilot.msu.edu>  
Subject: Source for R-390A meters

Last year I put some meters in my R-390A. They look good and they work very well.

For the carrier level meter I used #6002 from p. 2 of Fair Radio WS-94 catalog, new \$7.00. These are 1 3/4 inches square and fit the 1 1/2 inch hole

exactly. It is 100 microamps full scale movement with the actual scale 0 to 10. Unfortunately it is no longer listed in their WS-95 catalog, but they probably do still have at least a few available.

For the line level meter I used #4037 from p. 2 of Fair Radio WS-95 catalog, new \$7.00. These are the same size as above. The movement is 1 ma DC with the actual scale 0 to 100 DB which fits with it being an audio meter. I bought a bridge rectifier, Radio Shack 276-1181, and soldered two of the leads directly to the meter lugs and then soldered the meter wires to the source leads on the rectifier.

I chose this rectifier (the ratings are more than needed) because of its larger leads. However, I called Fair Radio a couple of times with questions about meter movements and they apparently figured out what I was up to, because the same meter is now listed at \$19.95 in their WS-95 catalog and is described as being for the R-390A. However, it is still a bargain. Both of these meters are precision sealed meter units, brand new in original packing. They are black and look original.

By the way, I chose to remove the front panel in order to have easier access to the meter hole and wires. The R-390A technical manual describes how to do this. It probably would be possible to do it without removing the front panel if you can find someone with small fingers or have some special tools.

Hopefully this info will help some of you in adding meters to those beautiful R-390A's. Stan K9RPA

From boatanchors@theporch.com Tue May 23 19:50:50 1995  
Date: Tue, 23 May 1995 14:50:50 -0500  
Message-Id: <2FC26613@smtpgate.rfc.comm.harris.com>  
From: "Gable, Edward M" <emg@rfpo2.rfc.comm.harris.com>  
Subject: subscribe

subscribe

From boatanchors@theporch.com Tue May 23 11:15:45 1995  
Date: Tue, 23 May 1995 06:15:45 -0500  
Message-Id: <2FC1ED31@smtpgate.rfc.comm.harris.com>  
From: "Gable, Edward M" <emg@rfpo2.rfc.comm.harris.com>  
Subject: test message

Sorry for bandwidth, testing

From boatanchors@theporch.com Tue May 23 16:42:15 1995  
Date: Tue, 23 May 1995 11:42:15 -0500  
Message-Id: <9505231639.AA10627@speckle.ncsl.nist.gov>  
From: morgan@speckle.ncsl.nist.gov (Roy Morgan)  
Subject: Re: voltage buckers and boosters

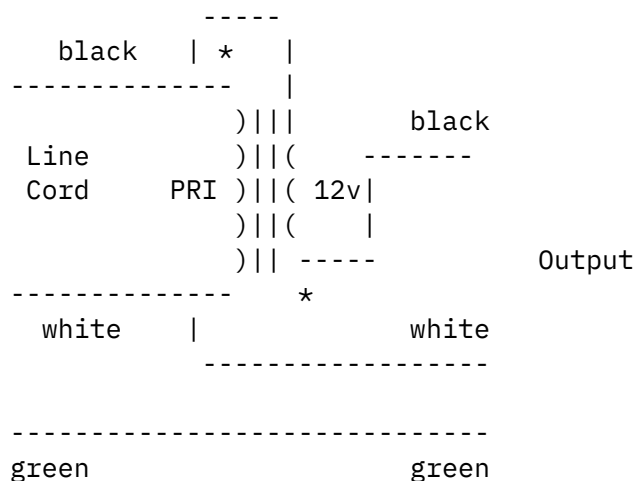
>> Making a line voltage buckler is easy and cheap. I'll post details if anyone  
>> wants them.

#### LINE VOLTAGE BUCKING

Here's the trick to use a filament transformer to reduce modern  
too-high line voltage to lower (110 or 115) line voltage for old  
radio equipment.

Most receivers don't take more than a couple of amps, and 2-amp  
transformers are easy to find. (If it runs hot, it's too small.)

#### Filament Transformer



\* Switch output leads if output is higher than line!

Choose filament transformer for the voltage needed to reduce  
the line voltage to the desired amount, and current rating to equal  
the needed load current or higher.

The transformer's primary is connected to the power line. The  
transformer's secondary is connected in series with the power being

sent to the outlet point. If it's connected right, the voltage out will be 12 volts LESS than the voltage in. (If it's backwards, the voltage out will be 12 volts MORE than the voltage in.)

If you're worried that the filament transformer is rated at 115 volts, not 125, you can connect the transformer primary to the output, not the input. (It'll work just fine, and this would increase the output voltage slightly.)

If you wanted to, you could mount the transformer inside the receiver as a permanent part of the radio. Attach the primary wires to the primary wires from the main power transformer. (If you do this, make sure that you have the polarity thing sorted out before you run the receiver on it. 125 PLUS 12 is too much!)

-- Roy --

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899  
(National Institute of Standards and Technology, formerly NBS)  
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov  
---

From boatanchors@theporch.com Tue May 23 17:13:46 1995  
Date: Tue, 23 May 1995 12:13:46 -0500  
Message-Id: <"d0aMlw?0000000000\*"@MHS>  
From: RICHARD\_HUMPHREY@hp5200.desk.hp.com  
Subject: Re: voltage buckers and boosters

Roy published:

```
>                               Filament Transformer
>
>
>      black    | *    |
> -----      |
>                )|||    black
> Line          )|||    -----
> Cord      PRI )||| ( 12v|
>                )|||    |
>                )|| -----      Output
> -----      *
> white    |          white
> -----
>
> -----
```

```

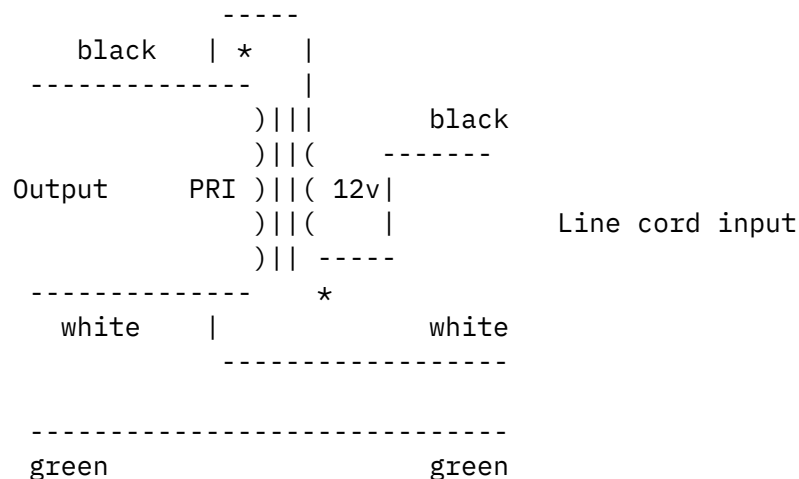
> green                      green
>
> * Switch output leads if output is higher than line!

```

I'm told that if you turn it around slightly, like this, the transformer runs cooler, because there are fewer volts per turn of wire. It now works like an autotransformer, rather than a voltage buckler.

Minor point, and probably 'who cares'. If you can hold your hand on it without serious discomfort, it's cool enough. (Any carbon resistors in the area probably care, though)

#### Filament Transformer



\* Switch leads on one winding if output is higher than line

A 117 to 12.6 volt transformer gives 90.2% output.  
A 120 to 12.6 volt transformer gives 90.4% output.

With 120 in, that gives about 108 out.  
Richard

From boatanchors@theporch.com Wed May 24 04:21:44 1995  
Date: Tue, 23 May 1995 23:21:44 -0500  
Message-Id: <Pine.SUN.3.91.950523211530.17791B-100000@coyote.rain.org>  
From: "Ray L. Mote" <rmote@rain.org>  
Subject: WW2 Nomenclature Article in ER

Got a call from Barry this evening. He will split article into two parts (Signal Corps and Navy systems in first part; AN system & comments in second part), and will try to run the first part in the June issue! As always, something could come up to delay that, but I sure hope not. If you'll just be patient a little bit longer, I think you'll find it is worth the wait. After publication of both parts, I'll call him and make sure he still has no heartburn with my uploading the ASCII text file to the Archives.